Near Detector Installation

John Voirin Task Manager

- Group Leader: Mech. Installation Grp. PPD
- Qualifications: Degrees:
  - B.S. Economics -M.S. Industrial Management
- Experience: Rigging coordinator for CDF Detector movement.
- Fermilab employee for 23 years
- Task manager for various fixed target experiments.
- **But most of all**:

- We have already built this.

We have handled all 281 planes at least twice.

Mounting the Scintillator

Storing On Temporary Racks

The Plan

Retrieve a Plane from New Muon Lab

Stage them in MSB

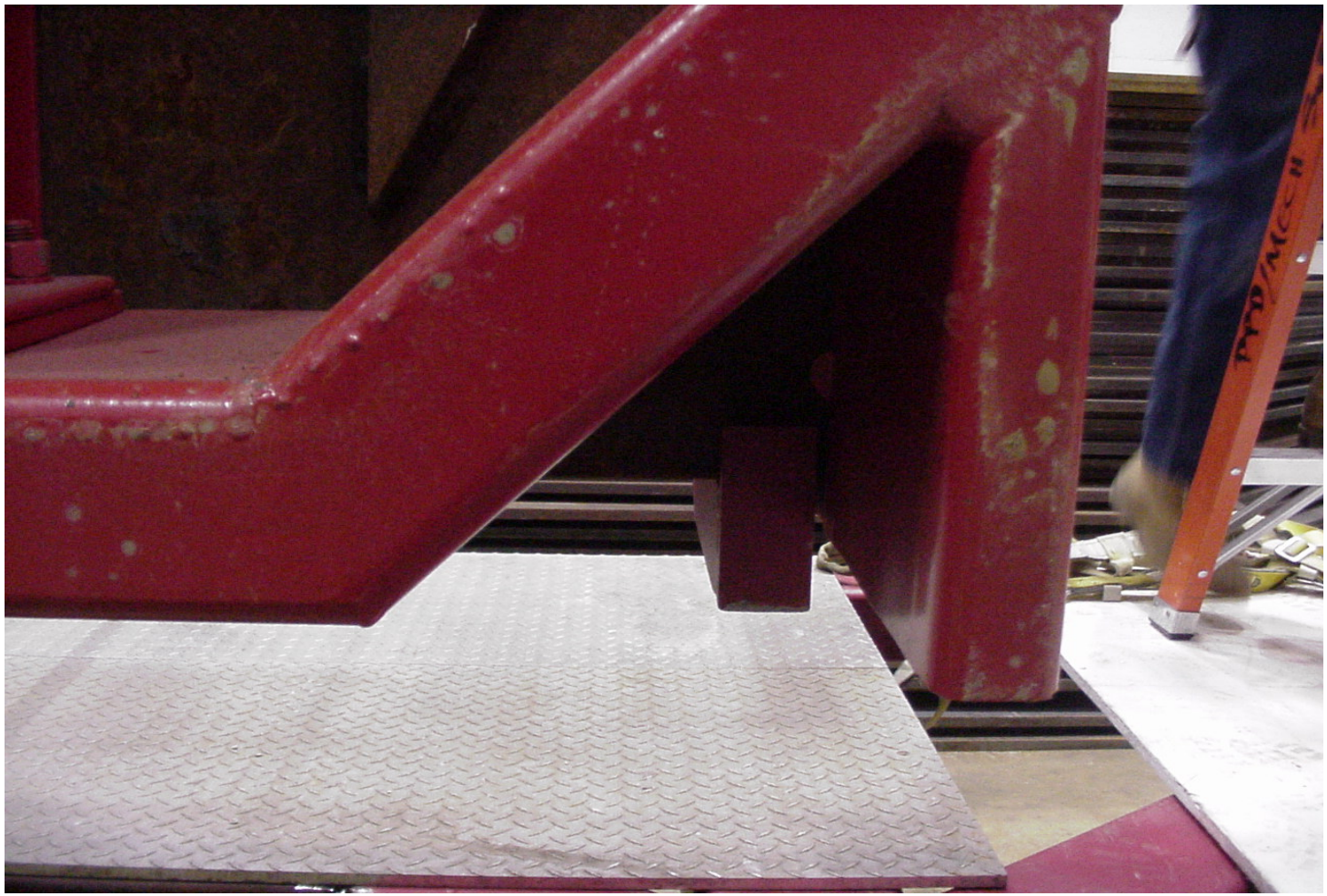
Pick strongback with shaft crane and bring it down to the bottom of the shaft.

Two Operators

➢ Positioning fixture, Cart, Strongback

Transfer to Positioning Fixture

Transfer



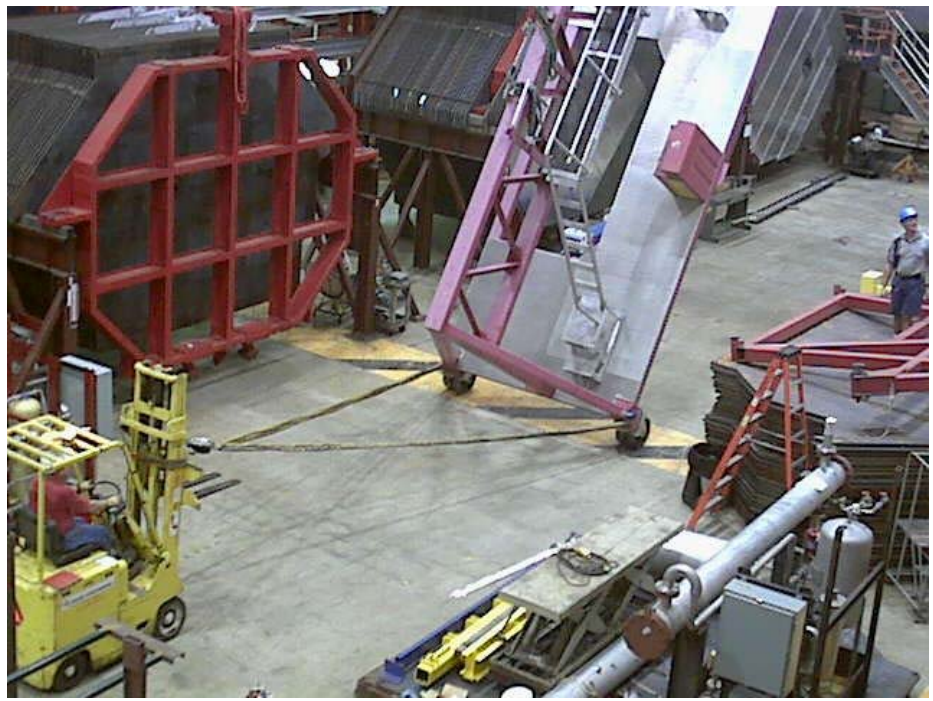
Transfer

- Cart is moved to Minos Hall Where we use the Hall crane to place it on the detector stand.

At this time other people get busy

Cart > Shaft

So We Rotate 90 degrees



Take over shaft and LOWER

At Bottom we return to Horizontal

Cart is too tall for shaft crane.
We will use outside crane through hatch in MSB roof.

We need to bring in 60’ coils

We will bring in the coils ahead of schedule and store then in Minos Hall.

When all Planes are assembled we will insert the coils and hook up the cooling system.

Hazards

- Rigging heavy loads
- Pinch points
- Working from heights
- Delicate equipment
- Sharp edges on planes
- Slippery/Wet environment
- Working with power tools
- Working underground

Mitigation of Hazards

- Daily toolbox meetings.
- Extensive planning.
- Proper PPE usage.
- Individuals will know their task and be cross trained.
- Special training for underground work.
- Develop a routine.
- ***EXPERIENCE***

Schedule

- We schedule for an average of two planes installed per day.
- Blank Planes require less check out time but more time to retrieve. We hope to do better as we go.
- We will stage three strongbacks in MSB and then install them as time permits.
- We want to start each day at the same point as the day before.

Questions???